

Shashank Jaiprakash

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EDUCATION

Columbia University

M.S. in Computer Science, GPA: 3.92

New York, NY

Exp Dec 2020

- Coursework: Algorithms, Machine Learning, ML Security, Deep Learning, Cloud Computing, Distributed Systems

National Institute of Technology, Tiruchirappalli

B.Tech. in Computer Science and Engineering, GPA: 9.12/10

Trichy, IN

Jun 2014

TECHNICAL SKILLS

Languages: C/C++, Python, HTML5, CSS, JavaScript, SQL

Frameworks: PyTorch, Numpy, Pandas, scikit-learn

Technologies: AWS, Node.js, CMake, Jenkins, Jupyter, Git

PROFESSIONAL EXPERIENCE

Amazon

Seattle, WA

Software Development Engineer Intern

May 2020 – Aug 2020

- Designed, developed, and deployed a solution to reduce time to deploy Throttle Limits in **GameLift** from 3hrs to 5s. Used **Java** for services implementation, and **Python** for creating migration scripts.
- Created a framework for periodic load testing in production environments.

Adobe Inc.

Bangalore, IN

Computer Scientist

Jun 2014 – Jul 2019

- Worked on **Captivate**, an industry-leading authoring tool to create e-learning content and capture screen recordings.
- **Promoted twice** in 3.5 years, to the role of Computer Scientist.
- Extensively worked on products developed in **C++** and web technologies like **Node.js**, **JavaScript**, **HTML**, **CSS**.
- Architected and prototyped *Captivate Next*, a lighter version of *Captivate*, using **C++**, **CEF**, **Node.js**, **React**.
- Led automation efforts to improve developer productivity. Created a CI/CD build pipeline using **Jenkins**, prototyped an automation test framework using **Selenium**, and unified cross-platform compilation using **CMake**.
- Designed, implemented, and maintained numerous flagship features including *Fluid Boxes* to enable auto-positioning of responsive content and *Effects* to animate objects with transforms on-stage, improving authoring time by ~50%.
- **Mentored** multiple new hires as part of technical onboarding and actively part of diversity-focused hiring initiatives.

Microsoft India Development Center

Hyderabad, IN

Software Development Engineer Intern

May 2013 – Jul 2013

- Used **ASP.NET MVC**, **MySQL** to create Business Intelligence Reports for Galaxy, a Bing ranker shipping platform.
- Consolidated metrics of business value, external resource usage, partner issues, and impact on a shipping cycle.

PROJECTS

Trajectograms: Which Semi-Supervised Trajectory Prediction Model to Use?

Feb 2020 - Jul 2020

- Novel method to predict parameters for a self-driving task by adaptively choosing from semi-supervised Deep Learning models for transfer learning, resulting in MSE improvement of 3.7% on steering angle and 5.95% on speed.
- Presented at Workshop on AI for Autonomous Driving, at ICML 2020.

Multi-task Network compression using Pruning

Feb 2020 – May 2020

- Optimized Multi-task Neural networks leveraging **PyTorch** pruning, achieving 60% theoretical speedup in inferencing with up to 21% degradation in the loss of individual tasks.
- Performed Ablation studies comparing model pruning strategies and their impact on individual tasks.

Adversarial Sentence Generation using Sentence-Level Perturbations

Feb 2020 – May 2020

- Generated adversarial sentences for Deep Learning models on a Natural language classification task, using FGSM, PGD, illustrating a 7.26% decrease in model accuracy in a white-box setting on the Yelp Polarity dataset.

Notes Sharing Application

Oct 2019 – Dec 2019

- Engineered a distributed, serverless, microservice-driven platform for students to search and collaborate over handwritten class notes, leveraging **AWS** services like **API Gateway**, **Lambda**, **DynamoDB**, **SQS**, **ElasticSearch**.